AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

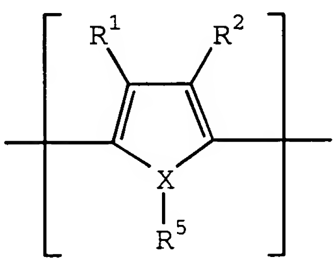
1. (original): A method for producing a solid electrolytic capacitor comprising an anode, a dielectric layer and a cathode formed on the dielectric layer, the anode being at least one member selected from niobium monoxide, niobium and an alloy mainly comprising niobium, or a mixture of niobium monoxide with niobium or an alloy mainly comprising niobium, the dielectric layer being a layer formed by the electrolytic oxidation (electrochemical formation) of the anode, and the cathode being an organic semiconductor, the method comprising sequentially repeating twice or more a step of exposing the dielectric layer to a temperature of 200 to 1,000°C before formation of the cathode and a step of re-electrochemically forming the dielectric layer.

2. (original): The method for producing a solid electrolytic capacitor as claimed in claim 1, wherein the step of exposing the dielectric layer to a temperature of 200 to 1,000°C is performed in the atmosphere containing water vapor.

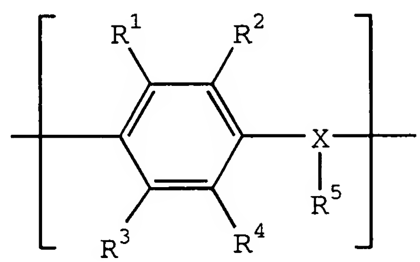
3. (original): The method for producing a solid electrolytic capacitor as claimed in claim 1 or 2, wherein the step of exposing the dielectric layer to a temperature of 200 to 1,000°C is performed in the atmosphere containing oxygen gas of 5% by volume or more.

4. (previously presented): The method for producing a solid electrolytic capacitor as claimed in claim 1 or 2, wherein the leakage current value of the dielectric layer after re-electrochemical formation is 1 nA/CV or less.

5. (previously presented): The method for producing a solid electrolytic capacitor as claimed in claim 1, wherein the organic semiconductor is at least one selected from an organic semiconductor comprising benzopyrroline tetramer and chloranile, an organic semiconductor mainly comprising tetrathiotetracene, an organic semiconductor mainly comprising tetracyanoquinodimethane, and an organic semiconductor mainly comprising an electrically conducting polymer obtained by doping a dopant to a polymer containing a repeating unit represented by the following formula (1) or (2):



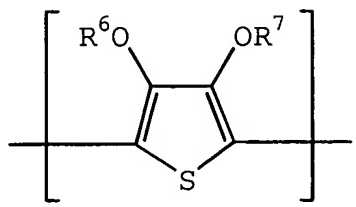
(1)



(2)

wherein R^1 to R^4, which may be the same or different, each independently represents a hydrogen atom, an alkyl group having from 1 to 6 carbon atoms or an alkoxy group having from 1 to 6 carbon atoms, X represents an oxygen atom, a sulfur atom or a nitrogen atom, R^5 is present only when X is a nitrogen atom, and represents a hydrogen atom or an alkyl group having from 1 to 6 carbon atoms, and each of the pairs of R^1 and R^2, and R^3 and R^4 may combine with each other to form a ring structure.

6. (original): The method for producing a solid electrolytic capacitor as claimed in claim 5, wherein the polymer containing a repeating unit represented by formula (1) is polymer containing a structure unit represented by the following formula (3) as a repeating unit:



(3)

wherein R^6 and R^7 each independently represents a hydrogen atom, a linear or branched, saturated or unsaturated alkyl group having from 1 to 6 carbon atoms, or a substituent for forming at least one 5-, 6- or 7-membered saturated hydrocarbon ring structure containing two oxygen atoms when the alkyl groups are combined with each other at an arbitrary position, and the ring structure includes a structure having a vinylene bond which may be substituted, and a phenylene structure which may be substituted.

7. (original): The method for producing a solid electrolytic capacitor as claimed in claim 5, wherein the polymer is selected from polyaniline, polyoxyphenylene, polyphenylene sulfide, polythiophene, polyfuran, polypyrrole, polymethylpyrrole, and substitution derivatives and copolymers thereof.

8. (original): The method for producing a solid electrolytic capacitor as claimed in claim 7, wherein the polymer is poly(3,4-ethylenedioxythiophene).

9. (original): The method for producing a solid electrolytic capacitor as claimed in claim 1, wherein the organic semiconductor has an electrical conductivity of 10^{-1} to 10^3 S/cm.

10. (original): The method for producing a solid electrolytic capacitor as claimed in claim 1, wherein the anode is a sintered body or a foil.

11. (original): The method for producing a solid electrolytic capacitor as claimed in claim 1, wherein the alloy mainly comprising niobium is selected from niobium-tantalum alloy, niobium-zirconium alloy or niobium-silicon alloy.

12. (original): The method for producing a solid electrolytic capacitor as claimed in claim 10, wherein the specific surface area of the sintered body is from 0.2 to 7 m^2/g.

13. (original): The method for producing a solid electrolytic capacitor as claimed in claim 1, wherein a lead wire formed of a material selected from niobium, partially nitrided niobium, partially oxidized niobium and tantalum is electrically or mechanically connected to the anode.

14. (original): The method for producing a solid electrolytic capacitor as claimed in claim 1, wherein the exposure of the dielectric layer to a temperature of 200 to 1,000°C is performed for 10 seconds to 100 hours.

15. (original): The method for producing a solid electrolytic capacitor as claimed in claim 1, wherein an electrically conducting layer is formed on an organic semiconductor layer.

16. (previously presented): A solid electrolytic capacitor produced by the production method claimed in claim 1.

17. (currently amended): An electronic circuit ~~using~~ <u>comprising</u> the solid electrolytic capacitor claimed in claim 16.

18. (currently amended): An electronic device ~~using~~ <u>comprising</u> the solid electrolytic capacitor claimed in claim 16.